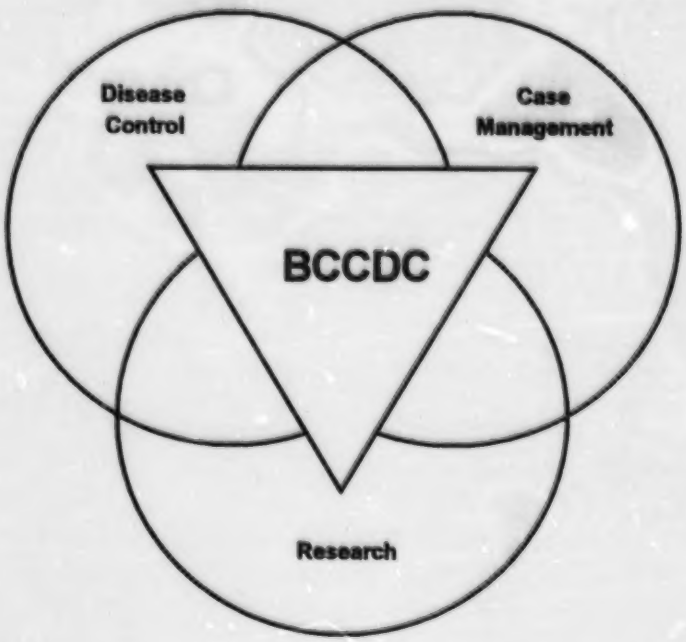
BC CENTRE FOR DISEASE CONTROL

Service Delivery Plan

1996 - 1997



BRITISH COLUMBIA
Ministry of Health and
Ministry Responsible for Seniors

LEGISLATIVE LIBRARY

MAJOR ANNUAL PERFORMANCE INDICATORS

Over 1,000,000	*Laboratory Tests*
Over 30,000	*Clinic Visits for Tuberculosis*
Over 3,000	*Encounters in the Tuberculosis Street Nurse Program*
Over 14,000	*Clinic Visits for STD/HIV*
Over 32,000	*Encounters in the STD/AIDS Prevention Street Nurse Program*
Over 100,000	*Pharmacy Prescriptions Filled*

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1 INTRODUCTION

In May of this year, BCCDC was the proud recipient of the Quality Council of British Columbia's Bronze Award. The award recognizes BCCDC's achievement in reviewing quality attributes and establishing a plan for the continuous improvement of service to the province.

This year we have three elements to focus on in our pursuit of Quality. The first is a broad base of quality training, namely the QUEST program (Quality Enhancement Through Skills Training). It is hoped that the provisions of process analysis and problem solving skills throughout the organization will provide the means for all staff to participate in quality improvements of the BCCDC.

The second thrust is to receive Special Operating Agency status from the Ministry. This status would provide us increased management flexibility, in return for agreed performance commitment. As we improve our ability to serve, we would be more able and encouraged to achieve effectiveness in the interest of redeploying funding to other program interests. All in all, we would be creating an environment of quality improvement.

The third element of our current year that is creating a lot of excitement is the completion of our new facility. In June 1997 we are planning to move to our purpose built premises at 12th Avenue and Ash Street in Vancouver. The opportunity to reconfigure our laboratories and clinics in the interest of efficiencies and effectiveness, while enjoying the atmosphere of a new and modern building is, for most of us, a dream come true. The orderly transfer of our current operations to the new site will present opportunities and challenges as never before.

We look forward to 1997/98 with great anticipation. However, we recognize that the success of next year is dependent on the achievements of this year. This plan builds the way to the future.

Ron C. Zapp
Managing Director

2 BUSINESS OF THE BCCDC

BC Centre for Disease Control (BCCDC), is a self contained, distinct, integrated and clearly defined organization operating under the Ministry of Health and Ministry Responsible for Seniors (The Ministry). The business of BCCDC is the prevention, detection and control of disease in the province and the provision of speciality health support services. BCCDC acts as the primary coordinating body for the province for the control of communicable disease including reportable disease as specified in schedules A and B of the Health Act Communicable Disease Regulations and the Venereal Disease Act.

Five integrated divisions within BCCDC operate in concert with the province's health units and departments to provide the coordinated services essential to manage and control disease in the province. The divisions are Communicable Disease Epidemiology, Non-Communicable Disease Epidemiology, Sexually Transmitted Disease (STD/AIDS) Control, Tuberculosis Control, and Provincial Laboratory.

BCCDC operates under the policy direction of the Minister of Health and Minister Responsible for Seniors and reports to the Executive Director, Health Protection and Safety Division. The five divisions of BCCDC and affiliated support services report to the Managing Director, BCCDC.

BCCDC's main facility is located at 828 West 10th Avenue in Vancouver, and is augmented by street nurse services in the inner-city of Vancouver, by an ambulatory clinic in New Westminster, and by consultative clinics at various locations around the province. Non-Communicable Disease Epidemiology is located in Victoria at 1515 Blanshard Street.

2.1 KEY BUSINESS FUNCTIONS

Communicable disease is transmitted from one individual or host to another. The type of communicable disease may be categorized by its causative agent (virus, bacteria, parasite), by the nature of the resulting disease (respiratory, gastrointestinal), or by the mode of transmission. Modes of transmission include respiratory (measles, tuberculosis, whooping cough), sexually transmitted (HIV, gonorrhea, syphilis, chlamydia), blood borne (hepatitis B, hepatitis C), enteric (hepatitis A, salmonella), vector borne (lyme disease, malaria) or waterborne (giardiasis, cryptosporidiosis). BCCDC receives reports of over ten thousand cases of communicable disease in the province, provides thousands of consultations to provincial health care practitioners, performs at least one million laboratory tests and provides close to one hundred thousand clinic services. The results of BCCDC's ongoing surveillance and epidemiological analysis characterizes the public health importance of a disease, provides the basis for development of prevention and disease control programs, and allows for evaluation of the effectiveness of these programs. When a significant increase in disease is identified by BCCDC or the regions, BCCDC provides crisis intervention and consultation to control the outbreak and minimize the effects. BCCDC also maintains provincial registries of active cases of tuberculosis, reportable cases of sexually transmitted disease and AIDS, meningitis, hantavirus, leprosy and rheumatic fever.

A key strategy to controlling communicable disease in the province is the immunization of children and high risk groups against vaccine preventable disease. Immunization has proven to be a highly cost-effective intervention to society. BCCDC develops and recommends provincial immunization programs, policies and procedures for controlling communicable disease, and standards for case management. Vaccines and other pharmaceuticals to support these and other disease control programs are acquired and distributed by BCCDC.

Two ambulatory clinics, one for clients testing for sexually transmitted disease (STD) and/or HIV, and one for clients testing for tuberculosis, are operated by BCCDC at the main facility. Assessment, treatment, and education are provided to clients, and for those clients presenting for HIV, counselling services are available by a trained psychologist. The clinics also serve as centralized sources for specialist advice and referral, as the major provincial training centre for medical residents, interns and public health nurses, and as sources for the surveillance and research into the diagnosis, treatment and public health management of these diseases. The Division of Tuberculosis Control operates a second ambulatory clinic in New Westminster to serve

the lower mainland population; consultation clinics for tuberculosis are also conducted in various regions of the province.

BCCDC's STD/AIDS Prevention Street Nurse Program is aimed at reducing the transmission of sexually transmitted disease and AIDS amongst street-involved persons. The program is focussed on STD/HIV education, testing, diagnosis and management. Support and advocacy, crisis counselling, first aid, and medical and social service referrals are also provided. The program also serves as the major provincial training site for STD/AIDS outreach. A similar Street Nurse Program is provided by BCCDC to street-involved persons to screen and treat for tuberculosis; and a BC Native AIDS Awareness Program provides an educational outreach program on STD and HIV to aboriginal communities and organizations in the province.

Specialized diagnostic, referral, and reference laboratory testing, and consultative services are provided by BCCDC's Provincial Laboratory. Same site interaction between the Provincial Laboratory and other Divisions of BCCDC provides greater opportunity for enhanced surveillance, early detection and intervention of disease outbreaks.

An on-site pharmacy provides the specialized pharmaceutical services required to support the communicable disease control programs in the province and provides specialized services to Kidney Dialysis Services (KDS).

Employees of BCCDC provide on-site and regional training and education to public health nurses, interns, residents, and laboratory technologists in the province to ensure consistency of practice using state-of-the art diagnosis and technology.

BCCDC also maintains linkages with local, national and international public health and affiliated organizations. Several of BCCDC's employees hold cross appointments to academic institutions.

2.2 MISSION STATEMENT

Mission Statement

The British Columbia Centre for Disease Control will provide the expertise and management necessary to prevent, detect and control disease in British Columbia.

2.3 GOVERNING PHILOSOPHY

BCCDC believes that the prevention, diagnosis, treatment and control of disease and the continuing improvement in the overall health of the BC population requires:

- A central research, diagnostic and teaching resource providing immediate expertise and current information on disease.
- Leadership and advocacy for the reduction of disease.
- The coordinated collection, analysis, maintenance and dissemination of population-based information related to the incidence of disease.
- Public education and awareness of risk and prevention of disease.
- Communication and liaison between the various unique, multidisciplinary health care providers.
- Maintenance and support of a solid resource base with the flexibility to respond to rapidly changing concerns and priorities.
- Integrity in client care with particular attention paid to confidentiality of personal information.

2.4 PRINCIPLES AND VALUES

In carrying out its mission and business activities, BCCDC is governed by the following principles and values:

Client Oriented Services

Services are designed to be comprehensive and accessible to all clients at risk for, or affected by, a communicable disease.

Quality and Excellence

Quality of service and workplace excellence are primary components in meeting customer expectations. Performance based management is used to maintain a cost effective and service oriented organization.

Partnerships

Linkages and partnerships between the community, government, health care professionals, academic institutions and other agencies and disciplines are essential to the prevention, treatment and control of disease and the achievement of a healthier society.

Effectiveness and Efficiency

Flexible, comprehensive prevention and treatment programs are essential to respond to the unique needs of individuals and communities. Programs and services are proactively planned, developed and delivered in an effective and efficient manner.

Evaluation

Ongoing evaluation of existing and proposed services, methods and results ensures that changing client needs are always being met.

Participatory Management

Employees must be given the opportunity to participate in decision making regarding corporate culture and direction, and the redesign of work processes for which they are responsible.

Human Resources

The rights and needs of all employees are considered in an equitable manner. Honesty, fairness, reliability and consistency are valued.

Human Dignity

Human dignity and confidentiality of client information are respected as integral components of service delivery.

2.5 GOALS

2.3 Goals

BCCDC will continue to fulfill its role as the provincial centre of excellence for disease control and will strive to maintain the excellent standard of public health services currently available in British Columbia. Six goals which reflect BCCDC's commitment to continuous service improvement and to the Ministry's strategic directions are described below.

Goal #1

BCCDC will provide a healthy, safe and rewarding work environment which fosters employee growth and development.

Goal #2

In accordance with schedules A and B of the Health Act Communicable Disease Regulations and the Venereal Disease Act, BCCDC will monitor all reportable communicable disease. Significant increases in disease and emergence of new disease will be identified and responded to in a timely manner.

Goal #3

BCCDC will develop and recommend provincial immunization programs, policy and procedure for disease control programs, and standards for case management of communicable disease. Vaccines and other pharmaceuticals to support these immunization and disease control programs will be acquired and distributed by BCCDC.

Goal #4

BCCDC will provide quality clinical, case management and laboratory services and will address the unique health needs of specific groups identified to be at risk for disease.

Goal #5

BCCDC will establish and maintain local, national and international partnerships with individuals and organizations concerned with disease prevention and control.

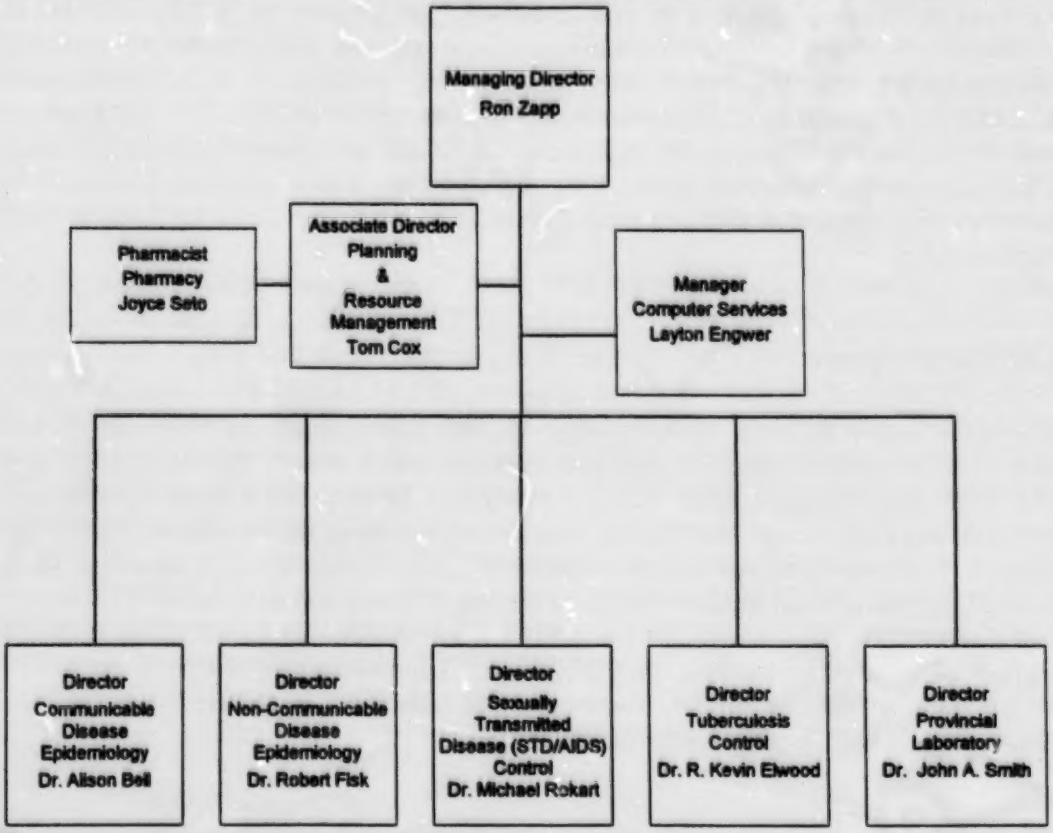
Goal #6

BCCDC will share its expertise in disease control with other health care professionals by providing consultation, resource materials, quality training and education programs, and by participating in applied public health research in support of disease prevention and control.

3 ORGANIZATIONAL DESCRIPTION

BCCDC operates under the policy direction of the Minister of Health and Minister Responsible for Seniors and reports to the Executive Director, Health Protection and Safety Branch. Five main Divisions of BCCDC operate interdependently to prevent, detect and control disease in the province. These are Communicable Disease Epidemiology, Non-Communicable Disease Epidemiology, Sexually Transmitted Disease (STD/AIDS) Control, Provincial Laboratory, and Tuberculosis Control. Support services for each of these Divisions are provided by Planning and Resource Management, Pharmacy, Health Human Resources, BC Systems Corporation and BC Buildings Corporation. The Divisions report to the Managing Director, BCCDC, as described in the abbreviated organizational chart. A description of each of the Divisions follows.

3.1 ABBREVIATED ORGANIZATION CHART



3.2 DIVISIONS OF THE BCCDC

Communicable Disease Epidemiology

The Division of Communicable Disease Epidemiology investigates and evaluates the occurrence of reportable and other communicable disease including vaccine preventable, enteric and emerging disease, and hepatitis in British Columbia. Staff use surveillance and other data to evaluate trends in incidence of communicable disease, determine conditions or risks which may cause outbreaks, and initiate control procedures for preventing and reducing the spread of disease. Their findings are communicated to public health officials, institutions and communities. Vaccines for all provincial funded immunization programs are purchased and distributed by the Division to the province's health units and health departments.

The Division is also responsible for the recommendation of policies and procedures for communicable disease control in the province. It serves as a key source of consultation for those involved in communicable disease prevention, control and population based research. The Division maintains close liaison with other Divisions of BCCDC, health units and departments, and the Laboratory Centre for Disease Control in Ottawa. Through its activities, the Division fosters cooperation with physicians, relevant medical personnel, universities and other provinces. In conjunction with the University of British Columbia it is a training site for Federal Field Epidemiologists.

Non-Communicable Disease Epidemiology

Non-Communicable Disease Epidemiology applies epidemiological methods to the prevention of chronic disease, injuries, and adverse environmental health effects, and for the promotion of population health. Responsibilities include investigating and reporting on the occurrence, distribution, and determinants of health and disease in the population; developing, analyzing and interpreting indicators and other information to describe population health status; and participating in provincial and national initiatives for the surveillance, prevention and control of non-communicable disease and the promotion of population health. The Division is responsible for coordination of the Provincial Health Officer's Annual Report and the publishing of BC Health & Disease Surveillance, a monthly community health journal.

Sexually Transmitted Disease (STD/AIDS) Control

The Division of Sexually Transmitted Disease (STD/AIDS) Control coordinates province wide efforts to reduce the spread of sexually transmitted disease (STD) such as AIDS, gonorrhea, chlamydia, syphilis, genital herpes, and warts, and to minimize their adverse health effects in British Columbia. Division staff provide expert consultation related to policy and procedure for STD/AIDS control to the Minister of Health, public health officials and medical personnel. A central registry and reporting system for reportable cases of STD and AIDS in British Columbia is maintained.

The Division operates an STD/AIDS Clinic which provides testing, counselling and education on all sexually transmitted disease, including an AIDS antibody testing and counselling clinic. Ongoing clinical research with the cooperation of clients is conducted to maintain excellence in service and treatment. The clinic is also used as the major provincial training site in STD and HIV/AIDS for medical residents and interns and public health nurses.

The Division's STD/AIDS Prevention Street Nurse Program is aimed at reducing the transmission of STD and AIDS amongst street-involved persons. The program is focussed on STD/HIV education, testing, diagnosis and management. Support and advocacy, crisis counselling, first aid, and medical and social service referrals are provided. The program also serves as the major provincial training site for STD/AIDS outreach.

The BC Native AIDS Awareness Program (BCNAAP) provides on-site STD and AIDS education to aboriginal communities on and off reserve. The program provides high quality community-based workshops and professional development training for aboriginal health and human service workers, and Band and Tribal Councils, in order to plan and deliver culturally sensitive and sound education sessions. The BCNAAP's activities include developing culturally appropriate education materials, and AIDS and STD policies and procedures relevant to the specific needs of Aboriginal communities and organizations.

The STD/AIDS Resource Centre provides up-to-date information to health care personnel, schools, businesses and the public. A variety of information and education resources are available in video, book, pamphlet and poster media.

Provincial Laboratory

The Provincial Laboratory provides state-of-the-art public health, diagnostic and reference microbiology testing, consultation, research and education to support the control of communicable disease in British Columbia.

Staff conduct an extensive range of tests to help diagnose problems such as food poisoning, water contamination, intestinal disorders, parasites, bacteria, influenza, skin eruptions, tuberculosis and various sexually transmitted disease. There is a comprehensive virological service including the provincial laboratory for HIV testing.

The Provincial Laboratory is also a provincial centre for medical research (in conjunction with the University of British Columbia's Medical School), and a training centre for medical students and residents.

Tuberculosis Control

The Division of Tuberculosis Control serves as British Columbia's referral centre for the prevention, control and treatment of tuberculosis. The Division operates programs to ensure a progressive reduction in the annual incidence rate of active tuberculosis and the associated rate of mortality.

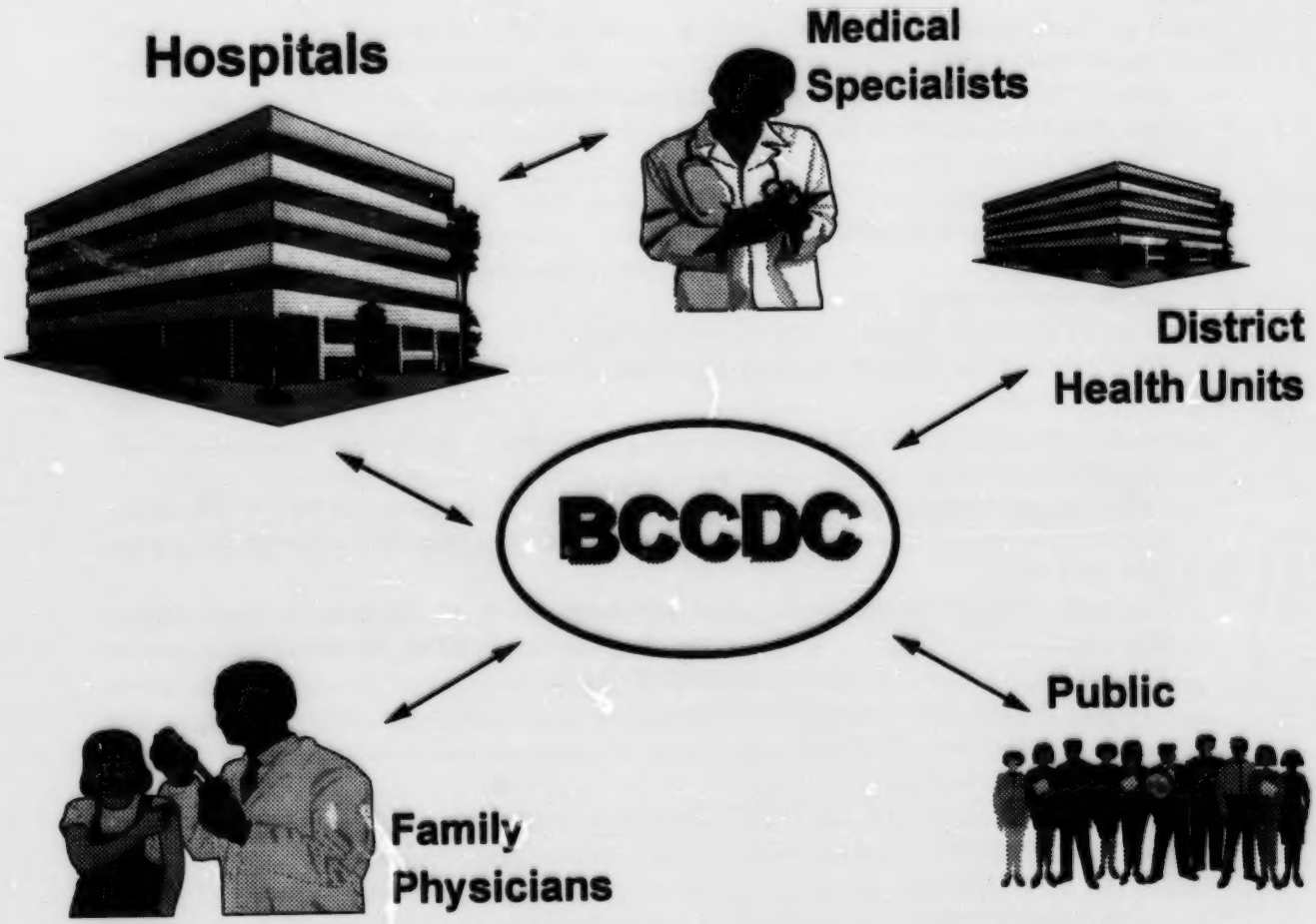
Division staff provide expert consultation related to policy and procedure for tuberculosis control to the Minister of Health, public health officials and medical personnel and provide public and client information and education. A central registry and reporting system for active cases of tuberculosis in British Columbia is maintained to monitor the incidence and prevalence of this disease.

Clinical services are provided through outpatient clinics in Vancouver and New Westminister. Field Operations, a sub-branch of the Division provides consultative clinics in various regions of the province to serve those clients outside of the lower mainland. A Street Nurse Program provides supervised treatment in the downtown east side of Vancouver. Tuberculin skin testing, contact tracing, vaccination, X-ray, arrangement of hospital admission for treatment, supervised treatment and follow-up of active cases are some of the services provided. The Division also contracts with the Federal Government to provide services to Aboriginal people including Registered Indians residing on reserves and to Aboriginal and Metis people living in urban and rural areas; and contracts with the Yukon government to provide services to that region.

3.3 CLIENTS OF BCCDC

BCCDC serves a diverse clientele, both inside the province and internationally. These include:

- the citizens of British Columbia,
- the Minister of Health and the Executive Committee,
- the Provincial Health Officer,
- Medical Health Officers,
- Public Health Nurses,
- Environmental Health Officers,
- physicians,
- water system operators,
- other Ministry of Health users of communicable disease data,
- Medical Services Branch & other branches of Health Canada,
- Vital Statistics,
- other provincial and federal government ministries,
- Statistics Canada,
- affiliated provincial agencies such as Centre for Excellence in HIV/AIDS, and community based intervention programs such as the Needle Exchange Program and DEYAS,
- national and international affiliated agencies such as Laboratory Centre for Disease Control, Ottawa; and Centres for Disease Control, Atlanta,
- the University of British Columbia departments of
    - Health Care and Epidemiology
    - Infectious Diseases
    - Microbiology
    - Pathology and Laboratory Medicine
    - Medicine
    - Paediatrics
- other universities,
- tribal council, band councils and affiliated organizations.


Hospitals
Medical Specialists
District Health Units
BCCDC
Public
Family Physicians

4 SERVICE DELIVERY PLAN

This section describes the service delivery initiatives that BCCDC will undertake to meet its mission and goals as outlined previously in this document.

4.1 IMPROVING OUR ORGANIZATIONAL AND PERFORMANCE STRUCTURE

Application for Special Operating Agency Status

A recent government initiative to increase accountability and efficiency in the public sector is supported by selected government programs obtaining Special Operating Agency (SOA) status. BCCDC will submit application for SOA status, to be effective in 1997, and will plan accordingly to accept corporate accountability and efficiency of its services.

Enhanced Management Performance

Increased efforts towards defining and analysing performance measurements will be made, aligned with continuing staff utilization studies and determining costs of services and programs. Benchmarks with other organizations and fee schedules will be conducted for comparative value. Where possible, BCCDC's programs and services will be evaluated for cost-benefit to the public's health.

Relocation of BCCDC

In June of 1997, BCCDC will be moving to a new site, located at 12th Avenue and Ash Street in Vancouver. Preparation for the move will commence in the spring of 1996 to ensure minimal disruption of services at the time of the move.

Silver Award, Quality Council of B.C.

BCCDC received the bronze level award for quality of service in early 1996 from the Quality Council of British Columbia. Preparation for application for the silver award will commence this year, which includes development and implementation of a comprehensive Quality Plan.

4.2 FOCUSSING ON PEOPLE

Providing a Healthy and Safe Work Environment

BCCDC will continue a number of initiatives to minimize employee exposure to risk, hazard and violence at their worksite. These include:

- compliance with regulations pertaining to health and safety including those of WHMIS, WCB, MSDS, and government;
- participation of employees from all levels on a corporate Health and Safety Committee;
- increase workplace safety procedures and ensure the reporting and follow-up of accidents or incidents;
- preparation and implementation of an Emergency Response Plan including earthquake preparedness;
- follow-up of last year's assessment of "Violence in the Workplace" and provision of violence awareness and prevention training to employees as required.

Monitoring Employee Satisfaction of the Work Environment

An Employee Satisfaction Survey will be conducted to continue monitoring employee satisfaction with the work environment. In addition, BCCDC will continue to support an "open door" culture to ensure employees have freedom to express their views to management and other decision makers. Employees will also have the opportunity to confidentially appraise their supervisor.

Recognizing and Rewarding

Increased efforts will be made to encourage employees to submit suggestions to the government's Employee Recognition Program. In acknowledgement of the time and resources sometimes required to investigate a process improvement or other quality initiative, employees may be relieved from their routine work responsibilities for up to one month to develop a project proposal.

Increasing Employee Participation in Decision Making

BCCDC will continue to support employee participation on divisional and corporate committees meeting to discuss issues related to improvements in the workplace or improving the corporate environment. All employees of BCCDC will have the opportunity to attend QUEST (Quality Enhancement Through Skills Training), a two day, government sponsored workshop.

Providing Education and Training

Retaining qualified, skilled employees to provide safe and quality service is one contributing factor to ensuring positive results for consumers of health services. BCCDC will support employees' continuing education and training on and off-site to enhance the knowledge and skills required in a centre of expertise. A new, in-house Systems Training Facility will be utilized to train employees on mainframe based computer programs.

4.3 ENHANCING CLIENT SERVICES

Client Satisfaction Surveys

Client satisfaction surveys provide constructive feedback on how well we are delivering our services. The Provincial Laboratory and BCCDC's three ambulatory clinics each conduct client satisfaction surveys at least every two years and target enhancement of services based on the results. This year provincial health units and departments will be surveyed to determine their satisfaction with our corporate services.

Services to Non-English Speaking Communities

Communication with health care providers is often more difficult for people who are not fluent and literate in English and may compromise health status through lack of contact and compliance, inadequate diagnosis and treatment or restricted ability to give informed consent for medical treatment. Although not dictated by policy, BCCDC has been fortunate to employ staff who collectively are able to provide counter, telephone, and interpretative services in at least twenty-four languages.

Centralized Laboratory Test Result Enquiry System

Incoming telephone calls for laboratory test results traditionally were transferred to the individual testing laboratory(s). To minimize the number of contacts and amount of time the caller must spend to obtain test results a centralized system was developed to respond to the callers request at the first point of contact. Details of types of calls and information requested will be analysed to determine the appropriateness of the calls and the efficiency of the system.

Biological Products Management System

BCCDC maintains primary responsibility for the 8 million dollar (approximate) provincial budget for the procurement and distribution of vaccines (biologicals) used for vaccine preventable disease control. An electronic inventory management system was installed to improve the efficiency and accuracy of monitoring distribution, consumption, wastage and replenishment of vaccines at provincial health units, departments and physician offices. The system has provided for a reduced turn-around-time for routine delivering of vaccines from two weeks to less than two days.

Emergency vaccines (eg. rabies vaccine, botulism anti-toxin) are delivered in less than twenty-four hours. Additional improvements to the biological products management system will be made.

Efficient Clinic Services

Employees of the STD/AIDS Clinic, the Willow Chest Centre and the New Westminster Chest Clinic use the following measures to monitor efficiency and effectiveness of service to clients attending the clinics:

- time between request for appointment and actual visit
- wait time in the clinic
- number of points of contact during the clinic visit
- time spent at each point of contact during the clinic visit
- client satisfaction surveys
- client chart audits to ensure appropriate diagnosis and testing, completeness of information and correct management

Using established standards of the above, employees are able to ensure clinic services do not deviate greatly and the entire client visit is efficient and satisfactory to the client. In addition, results can be used to assess the appropriateness of visit at each point of contact and the correlation between time and quality of visit.

Improved Laboratory Testing Turn Around Time (TAT)

The following are examples of improved turn around time (TAT) of Provincial Laboratory tests that occurred last year.

- TAT for results of positive tests for hepatitis C supplementary testing reduced by one day
- TAT for yeast identification in isolates of critical specimens (eg. CSF and blood) reduced from 10 days to 2 days by use of Remel RAPID Kit
- TAT for dermatophyte identification reduced from 5 weeks to 4 weeks
- TAT reduced from 3 weeks to 1 week for identification of mycobacteria species in culture

Further enhancements to decrease turn around time of other tests will take place this year.

Increased Efficiency of Chest Radiography

An automated film changer for chest radiography is now in use in the Willow Chest Centre. The efficiency of the equipment has decreased a client's time in radiology by 50%, enabled radiography staff to increase the number of clients attending by 60%, and reduced repetitive dark room staff tasks by 90%.

Improved Consultation Time - Response to Adverse Reactions to Immunization

Consultation on adverse reactions temporally associated with vaccination is routinely provided by BCCDC to health care workers administering vaccines. Staff in Communicable Disease Epidemiology Services have reduced the time between request and consult from one month to less than one week. This helps to reduce potential delays to the routine immunization schedule and ensures timely protection of adults and children against vaccine-preventable diseases. Continued monitoring of this service will ensure that consults are provided within this minimal time period.

4.4 IMPROVING ABORIGINAL HEALTH

HIV/AIDS in Aboriginals

In 1995, BCCDC's enhanced surveillance of HIV confirmed that aboriginals are over represented amongst those acquiring HIV in British Columbia. These findings were reported at the First National Aboriginal HIV/AIDS Surveillance and Research Meeting in March, 1996 to increase understanding of British Columbia's surveillance approach and its efficacy in identifying trends in HIV infection among sub-groups such as aboriginals. Enhanced surveillance will continue this year.

Tuberculosis Control On Reserves

Under contract to the Federal Government, BCCDC delivers a provincial program to control tuberculosis among status (registered) Aboriginal persons on reserve. In 1995, status Aboriginal Canadians in British Columbia had a rate of tuberculosis of approximately 3 times that for the general population. A tuberculosis skin testing

program on reserves has been initiated as a step towards identifying subjects infected with tuberculosis and preventing the development of active disease. Over the 12 month period, 3,285 tuberculosis skin tests have been done on reserves; during this same period, 319 persons were offered preventive treatment and 133 accepted. Two additional full-time nurses were hired to expand services to Aboriginals, both on reserve and in the Vancouver downtown area. In addition, funding is forthcoming from Medical Services Branch, Health Canada to study attitude and beliefs among Aboriginals regarding tuberculosis.

Supervised Medication

Supervision of twice-weekly prophylactic therapy for tuberculosis will be provided by BCCDC street nurses in the inner-city area of Vancouver to Aboriginals attending the Needle Exchange Program and who are identified as being infected with tuberculosis.

BC Native AIDS Awareness Program (BCNAAP)

The BC Native AIDS Awareness Program (BCNAAP) will continue to address the HIV/AIDS and STD education needs of British Columbia's Aboriginal population. The program will also continue networking across jurisdictions and disciplines within both Aboriginal and Non-Aboriginal communities to further enhance an increase of the BCNAAP profile; increase referral into the program; increase the aboriginal perspective/ content in non-aboriginal programming; increase awareness of diverse issues facing HIV/AIDS patients and the state of service development across the province; and to increase knowledge of province wide referral resources and in-take procedures.

Joint Screening for Cervical Cancer and Sexually Transmitted Disease in Aboriginal Women

Nurses from BC Cancer Agency (BCCA) currently provide targeted, on reserve screening for cervical cancer, chlamydia and gonorrhea. In an effort to expand community access to this program and increase its effectiveness, a partnership will be developed between BCCA and BCNAAP to include HIV testing during BCAA screens, while education of cervical cancer will be provided by BCNAAP.

4.5 TARGETING AT RISK GROUPS

Vancouver Inner City Population

Mobile Outreach services will continue to expand from "street rounds" to regular evening mobile services that includes HIV/STD prevention, education, distribution of condoms, 'health alerts', 'bad date sheets', harm reduction counselling, needle exchange, treatment of abscesses, first aid, home visits and an introduction of services. This service also reaches high risk clients that may not frequent the down town core or who have been dispersed throughout the lower mainland.

In addition to the supervised medication program for clients with tuberculosis in the inner city of Vancouver, services will be expanded to include one street nurse available to clients of the downtown needle exchange program.

Intravenous Drug Users (IVDU)

There is a growing epidemic of HIV infection among intravenous drug users in the province. In 1995/96, over 300 intravenous drug users had positive HIV tests and have overtaken men who have sex with men as the risk group with the highest number of new positive tests. Needle exchange, and treatment of abscesses and cellulitis will be provided by BCCDC street nurses as part of the harm reduction repertoire.

A formal outbreak investigation was completed last year to determine the underlying causes of the HIV epidemic among the intravenous drug user population. Findings from this study have led to recommendations for courses of action to help control this epidemic. In addition, BCCDC in concert with the BC Centre for Excellence in HIV/AIDS, is involved in a longitudinal study of 1,000 intravenous drug users to evaluate, over time, the incidence and prevalence of HIV, the prevalence of important risk behaviours and the impact of control measures.

Ethnic Minorities

South Asian, Hispanic, Black and Asian communities are clearly affected by HIV. Ethno-culturally appropriate transmission of information about HIV and education strategies are being organized and delivered by BCCDC. Health care workers and educators of South Asian, South East Asian, Latin American and African origin are employed to provide education sessions on HIV issues.

Pregnant Women at Risk for HIV Transmission

The results of a study in the United States (1994) showed that pregnant women who are infected with the AIDS virus (HIV positive) can reduce the chance of their baby catching the virus from 25 per cent to only eight per cent, if they receive prophylactic treatment with zidovudine (AZT). In 1994, BCCDC recommended that all pregnant females in British Columbia be tested for HIV. BCCDC will continue to evaluate the success of this recommendation.

Young, Gay Men at Risk for HIV Infection

BCCDC is assisting the BC Centre for Excellence in HIV/AIDS in the enrollment of young, gay men in a cohort study (Vanguard Study) to determine if this population are relapsing to higher risk behaviour patterns, and becoming infected by HIV.

Immigrants at Risk for Tuberculosis

In 1995, 70% of new active tuberculosis cases were in foreign-born individuals. Continued screening for tuberculosis and implementation of surveillance recommendations for immigrants will ensure early identification of active cases and appropriate preventive therapy will minimize the chances of the disease spreading to others. In early 1996, the Willow Chest Centre became a designated provincial centre for screening of tuberculosis in individuals applying for immigrant status. The cost of the screening which includes a chest x-ray is borne by the applicant. Having a designated centre has facilitated the screening process, allows early attention to those with suspicious x-rays, and ensures prompt diagnosis of potentially infectious cases of active tuberculosis. Additional testing may also be initiated at the Willow Chest Centre which is considerably more convenient for the applicant. In June, 1996 an evaluation of the program will assess the case finding of tuberculosis and cost-benefit of this new initiative.

Children and Adolescents at Risk of Measles

In support of the national goal to eliminate measles in Canada by the year 2005, BCCDC is participating in implementing two new programs in the province: 1) introduction of a routine second dose of measles-mumps-rubella vaccine into the infant immunization schedule at 18 months of age; and 2) a "one time only" catch-up campaign of measles-rubella vaccination of all children in British Columbia aged 19 months to the end of high school. Up to 50,000 children per year are eligible for the

immunization at 18 months of age; up to 800,000 children are eligible for the catch-up program. It is expected that immunization coverage for the catch-up campaign will exceed 85% of the target population.

The Elderly and Other Groups at Risk for Pneumococcal Disease

A pneumococcal immunization program for the elderly and high risk groups has been recommended by the National Advisory Committee on Immunization and by other expert groups. BCCDC will provide pneumococcal vaccine to asplenic patients and those who have undergone bone marrow transplant. These two groups are among those at highest risk of serious pneumococcal infection. In addition, an evaluation of an expanded immunization program will be undertaken.

Detainment of Individuals With Active, Infectious Tuberculosis

British Columbia currently does not have a secure facility to detain people with active, infectious tuberculosis who are unwilling to comply with treatment under Section 7 of the Health Act. Last year, negotiations began with Corrections Branch, Ministry of Attorney General for the provision of detainment facilities at the Vancouver Pre-Trial Services Centre and the Burnaby Correctional Centre for Women in Burnaby. It is anticipated that these facilities will be available in 1996.

Hepatitis C At-Risk Populations

In 1995, 5000 cases of hepatitis C were reported in the province, more than twice as many as the previous year; an even greater number of reported cases is expected in 1996. In response, BCCDC has formed a multidisciplinary working group to develop education materials for physicians and health care workers. Information will be distributed regarding the medical and public health aspects of hepatitis C virus infection. This information will include guidelines for the reporting of hepatitis C infection, identification of infected individuals, counselling, and follow-up. The overall strategy will enable population-wide access to information regarding both the prevention of hepatitis C virus infection, and the community resources available for the counselling and support of those infected.

Travellers at Risk for Malaria

In 1995, 218 cases of malaria were reported in the province, more than twice as many as the previous year. A BCCDC research project was undertaken to investigate this increase. Initial analysis of results indicates that appropriate chemoprophylaxis is not always recommended or provided to prospective travellers. Final results will be distributed to health units so they can forward recommendations to local physicians as required.

4.6 ENHANCED SURVEILLANCE, SCREENING AND OUTBREAK INVESTIGATION

Reportable Diseases Awareness Campaign

In an effort to increase the reporting of disease required under the Health Act Communicable Disease Regulations several initiatives will take place to increase the awareness of physicians and laboratories. A letter listing all reportable diseases and respective conditions will be sent to all hospital and private laboratories; the letter will also request that procedures be reviewed to ensure that appropriate reporting occurs. The list of reportable disease will also be published in the British Columbia Medical Journal.

Hepatitis A Surveillance

In 1994, a hepatitis A vaccine was licensed in Canada. It is provided in British Columbia to all hemophiliacs and is available for purchase by travellers going to countries where hepatitis A is a risk. Enhanced surveillance of hepatitis A cases will be conducted to determine high risk groups for infection. The resulting information will be used to guide hepatitis A control initiatives.

Group A Strep (invasive) and Neonatal Group B Strep Surveillance

To determine the incidence of invasive group A and neonatal group B streptococcal disease, a special province-wide laboratory-based surveillance initiative will be conducted. Information gained from this surveillance project will be used to design and evaluate disease control initiatives.

Improvements to Data on Pregnancy Outcomes

In previous years, the Division of Non-Communicable Disease Epidemiology has prepared an annual package of data on teen pregnancy, for distribution to provincial Medical Health Officers and other interested parties. In cooperation with data sources, the database on pregnancy outcomes is being expanded to include all maternal age groups. Efforts are also being made to improve the completeness and accuracy of the data and to streamline the compilation and dissemination of information. This initiative will improve the quality and accessibility of information on pregnancy outcomes - information which will enhance British Columbia's capability for planning and evaluating reproductive health policy and programs.

Enhanced Surveillance of Respiratory Disease

In response to requests from provincial Medical Health Officers concerned about air pollution and respiratory disease, comprehensive epidemiological analysis of respiratory disease hospitalization and mortality patterns will be developed with data collected from the last ten years.

Analysis of Toxoplasmosis Outbreak

In 1995, a multidisciplinary team from BCCDC, in conjunction with the Capital Regional District, investigated what is recognized as the world's largest known outbreak of toxoplasmosis. Municipal drinking water was determined to be the likely source of the outbreak. The details of the investigation and the findings will be analysed and disseminated internationally.

Enhanced HIV Surveillance

Funding from Health Canada has enabled enhancement of the provincial HIV surveillance system which will eliminate duplicate counting and collect missing risk information. This system is the first reliable contributor to a federal HIV surveillance system. Additional improvements and enhancements will be made to the system.

Enhanced Enteric Disease Outbreak Investigations

Early recognition of enteric disease outbreaks depends largely on prompt reporting of enteric (food borne) illnesses by health practitioners to health units and subsequent notification to BCCDC. To improve reporting, the Provincial Laboratory initiated and placed in service a guide of instructions to be used to coordinate procedures for specimen collection and testing and for outbreak investigation of gastrointestinal disease. It is expected that use of the guidelines by health units, coordinated testing efforts between the laboratory sections of Enterics, Food Poisoning, Parasitology and Virology and enhanced communication with Communicable Disease Epidemiology will result in a more timely identification of the causative agent of the outbreak and control of the outbreak. Communicable Disease Epidemiology will also assist health units in increasing enteric disease surveillance to aid in identifying risk factors or risk groups for infection and to develop necessary disease control policies.

Surveillance of Hantavirus

Earlier this year, BCCDC scientists found indication that mice, in coastal regions of British Columbia, have evidence of endemic hantavirus infection, in addition to those mice found in semi-desert regions of the interior of the province. However, the evidence was not reflected in a high incidence of transmittal to humans as it is still quite rare to find hantavirus infection in humans. Case specific investigation will continue as required.

Lyme Bacterium in British Columbia

Lyme disease is caused by a spiral-shaped bacterium (*Borrelia burgdorferi)* which affects the skin, heart, and nervous system. It is treatable with antibiotics, but can become chronic if left untreated. Research conducted by the BCCDC, in concert with the Lyme Borreliosis Society, has confirmed the presence of a bacterium in tick populations and deer mice. Ticks can transmit Lyme disease to humans. Researchers further isolated a new tick species found for the first time to harbour the Lyme disease spirochetes and presented these important findings in 6 papers at the Lyme disease Conference held in Vancouver in April, 1995. Additional work on antigenic and genetic characterization of the British Columbia isolates will continue.

Enhanced Surveillance of Waterborne Parasite Disease

Cryptosporidiosis and giardiasis are intestinal infections caused by very small parasites. The diseases are usually contracted by drinking contaminated water. The infections, while potentially wide spread, are not usually fatal except in immunocompromised individuals. A provincial committee, called Water and Communicable Diseases (WACD), which includes representation from BCCDC, was formed in 1995 to address the issue of protozoa in drinking water. Additional BCCDC scientists have joined with WACD to form a team to develop an enhanced surveillance program which will include forwarding letters to provincial Medical Health Officers requesting extra specimens from potentially infected individuals and completion of a lengthy questionnaire. In partnership with municipalities and other agencies, the team will also discuss a proposal to expand parasite monitoring in drinking water.

WACD is also conducting an assessment of the risk of parasite contamination of drinking water in the province by collecting and testing sera from residents of Prince George, Rutland and Vancouver for parasite antibody and by regular testing for parasites in the drinking water.

Increased Chlamydia Contact Tracing

Genital infection with *chlamydia trachomatis* is the reportable sexually transmitted disease with the highest incidence in British Columbia. Women not receiving treatment for chlamydia infection are at risk for infertility or tubal pregnancy, and those who are pregnant may be at increased risk for spontaneous abortion or stillbirth, or their babies may suffer from eye infections or pneumonia. Chlamydia became a reportable disease in 1994. BCCDC will continue to enhance and provide increased chlamydia contact tracing in the province to reduce the number of cases. It is recommended that provincial health units and physicians do the same. Increased contact follow-up, diagnosis and treatment will continue.

Post Landing Tuberculosis Surveillance of Immigrants

Landed immigrants arriving in British Columbia with inactive tuberculosis or who have been previously treated for tuberculosis are placed under medical surveillance by BCCDC. Each case is individually assessed, and steps are taken to ensure inactivity. Previously, notification to BCCDC by federal immigration authorities of arrival of these individuals to British Columbia was incomplete or occurred much later than the arrival date, thus risking transmission of infection. Arrangements are being negotiated for

notification to occur at the entry point of arrival, rather than through Ottawa, which will enable these individuals to be contacted and surveyed closer to their arrival date.

Needs Assessment of Long-Term Care Facilities

Provincial long term care facilities were surveyed last year to determine their requirements for infection control, such as surveillance, education, and resources. The surveys have been returned and will be analysed with a view to developing recommendations.

4.7 INNOVATIVE CASE MANAGEMENT AND TECHNOLOGY

Improved Prophylactic Treatment for Chlamydia Infection in High Risk Women Undergoing Therapeutic Abortion

Many women presenting for therapeutic abortion are at increased risk of being chlamydia positive. Testing is normally done at the time of the abortion but treatment of women testing positive and contact follow-up are not always pursued. Networking efforts with abortion clinics will be increased to ensure notification to BCCDC of women testing positive and follow-up with contact tracing. BCCDC will also recommend prophylactic treatment to women presenting for abortion.

Single Dose Versus Seven Day Treatment for Chlamydia

Single dose treatment for chlamydia can increase cure rates and reduce complications. Single dose therapy with azithromycin one gram will be provided this year by the STD/AIDS clinic to laboratory confirmed chlamydia cases as an alternative treatment to the currently used seven day doxycycline treatment. Estimated savings to health care overall could be $335,000 per annum.

Evaluation of an Improved Diagnostic Test for Chlamydia

A collaborative study involving the Provincial Laboratory and the Division of Sexually Transmitted Disease (STD/AIDS) Control was conducted early in 1996 to evaluate two amplified nucleic acid tests for the diagnosis of chlamydia infection. Compared to the enzyme immunoassay test currently used, the nucleic acid tests were less invasive and showed an estimated 15% increase in sensitivity and will therefore be used for future testing for chlamydia.

Blood and Body Fluid Exposure Protocol

Currently, persons who have accidental percutaneous or permucosal contact with blood or body fluid are required to attend different locations to receive prophylactic treatment, especially for HIV and hepatitis B. New guidelines will be recommended for the management of accidental exposure and centralization of prophylactic treatment and counselling.

Evaluation of a New Diagnostic Test for Measles

In collaboration with the province of Ontario, BCCDC will assist in evaluating a new diagnostic test for measles which uses saliva instead of blood. Saliva testing would allow diagnosis to be made in a physicians office without costly and invasive blood tests.

Recent, Innovative Laboratory Testing Developments & Procedures

Nucleic acid methodology has been used to improve laboratory testing such as chlamydia detection, culture confirmation of mycobacteria, identification of hepatitis G and speciation of problem gram positive cocci. Additional improvements with the use of this technology will continue.

4.8 ELECTRONIC DEVELOPMENTS TO ENHANCE PROGRAMS AND SERVICES

Internal System Enhancements

A strategic five year technology plan for BCCDC's systems will be developed. The plan will take into consideration business and information needs to determine computer hardware and software requirements and will provide an overview of the issues to be addressed to provide a productive and cost effective information technology environment. In particular, new applications systems will be further developed for the Divisions of Tuberculosis Control, Provincial Laboratory and Communicable Disease Epidemiology and for Pharmacy. Funding for new hardware and software to support a corporate network and to accommodate the environment of the new building will be pursued.

Statistical Software and Mapping Program

Software capabilities for outbreak investigations and relevant research will be improved by acquiring epidemiological computer programs that will allow for geographical mapping of disease cases and improved statistical analysis.

Electronic Transmission of Communicable Disease Policy and Procedure

BCCDC is responsible for maintaining, updating and distributing the provincial Communicable Disease Control Manual. Work is progressing for the electronic transmission of this manual which will replace the current laborious, costly, and time consuming method of providing hardcopy to all users. It is expected that in addition to increased efficiency and a decreased turn around time for distribution, there will be improved methodology for updating of the manual.

Intranet and Intraweb Information

In 1996/97, the following documents/publications will be available on the Internet (international) and/or the Intranet (local):

- Provincial Laboratory Users Manual
- BC Health and Disease Surveillance
- Communicable Disease Control Manual

CBEpInfo Electronic Bulletin Board

The Division of Communicable Disease Epidemiology transmits up-to-date information on communicable disease issues and immunization by means of an electronic bulletin board (CBEpInfo) on the government's OV system. The bulletin board will be continued to be used to provide an inexpensive and expedient method of ensuring provincial public health workers are notified of events in a timely manner.

Client Management Information System for STD Client Visits

The Division of Sexually Transmitted Disease (STD/AIDS) Control's electronic client management information system is available for use by provincial health units who have clients testing for sexually transmitted disease. Health units in Kamloops, Surrey, and New Westminster, have recently installed the system; health units in Prince George and in North and South Okanagan will install the system in early1996. In addition to improving management of client charts, the system eliminates the need for hardcopy charts, is efficient at generating reports and printing specimen labels, and can match aliases.

Electronic Transmission of Laboratory Test Results

Provincial Laboratory test results are transmitted to clients by a system called Medinet. At least 50% of clients receive their report electronically; the remainder of clients receive results by facsimile or mail. Turn around time for electronic reporting from the time the report is generated to transmission is one day. Ongoing quality control audits will ensure the accuracy of reports and that the efficiency of the system continues.

4.9 EDUCATION, TRAINING AND COMMUNICATIONS

Improved Policy, Procedural and User Manuals

In 1996/97, a new or improved version of the following manuals will be available to clients of BCCDC in addition to the regular manuals and reports available:

- Provincial Laboratory User Manual - revised
- Tuberculosis Policy and Procedure (as a component of the CDC Policy and Procedure Manual) - revised
- Communicable Disease Epidemiology Annual Report - new
- A Guide to the Laboratory Investigation of Gastrointestinal Disease Outbreaks - new
- The Division of Tuberculosis Control Procedure Manual - new

STD/AIDS Resource Centre

The STD/AIDS Resource Centre provides up-to-date information to health care personnel, schools, businesses and the public. A variety of information and education resources are available in various media form including videos, book, pamphlets and posters. The Resource Centre will expand the information available on sexually transmitted disease and provide comprehensive packages of material on the topic of interest with supplementary, affiliated health topics.

Professional Education Accessed Closer to Home (PEACH)

The Professional Education Accessed Closer to Home (PEACH) program was originally developed in response to numerous requests from outlying communities to have educational and training modules on STD and AIDS be "home delivered". This approach to delivering the program enabled the requesting health unit to train many of their nursing employees on-site for the same amount of dollars they would have spent sending two employees to Vancouver for training. There have been 940 participants attending the PEACH program over the last two years and an even higher demand is expected this year.

Report on the Health of Canadians

In coordination with the Provincial Health Officer, Non-Communicable Disease Epidemiology will be supporting a federal, provincial and territorial initiative to report on the health status of Canadians. The final report will be submitted in September, 1996 for approval by each of the federal, provincial and territorial Ministers of Health and will be distributed nationally as a tool to measure Canada's progress in achieving health in the population.

Video Audit of STD/AIDS Training Program

In response to the increasing number of requests for access to the STD/AIDS week-long training program for provincial health nurses, video-taped elements of the training program and an 'Audit Kit' were developed which can be sent out on request. These initiatives will continue to be an extremely useful tool for employees' educational needs, updating previously trained nurses, introducing educational material to individuals awaiting access to training, and acting as a reliable source of STD information for teachers and educators.

Self Evaluation Program for Health Units

To ensure accessible and equitable services for sexually transmitted disease in the province, a document known as the Basic STD Program for provincial health units and departments was produced. The document is essentially a list of goals for the regions to achieve with regard to STD control activities. As a supplementary tool to gauge a health unit or departments success in delivering STD services, a self-evaluation questionnaire will be distributed to determine where further assistance in developing or supporting programs in the regions is required. This initiative will be reviewed to determine its applicability to management of tuberculosis in the regions.

Provision of Program Education Materials to Other Jurisdictions

British Columbia is frequently at the forefront in implementing immunization or other disease control programs. Examples include implementation of a universal hepatitis B immunization program for all grade six students (1992); the use of a pentavalent vaccine for the primary childhood immunization series (1994); a "catch-up" campaign for measles vaccination (1996). Consequently, BCCDC is frequently requested to

provide respective policy, procedure, and resource materials to provinces, territories and other jurisdictions developing their own programs. In addition to continuing this service, employees of BCCDC will continue to participate in national and international working groups to further promote consistency in disease control.

Health Files

BCCDC is a major contributor to the production of the Ministry's Health Files, a series of fact sheets about a wide range of public and environmental health and safety issues. One of the major functions of the Health Files is to provide basic "informed consent" information (ie. descriptions of symptoms, prevention, possible vaccine reactions, contra-indications) to adults receiving immunization and to parents of children undergoing basic childhood immunization. The Health Files are highly cost-effective and accessible to a province-wide audience. They can be produced quickly, in response to a newly emerging health issue. BCCDC will continue to contribute to the production of the Health Files and ensure their accessibility to staff and clients attending BCCDC.

Public Health Grand Round Video Tapes

On a monthly rotating schedule each Division of BCCDC presents at BCCDC's Public Health Grand Rounds. The presentation consists of applied, practical information relevant to the activity of the Division and is at a scientific and academic level targeted towards an audience of employees of BCCDC and provincial health practitioners. Following each Grand Rounds, provincial health units and departments receive a video tape copy of the presentation at no cost to the unit or department. This initiative will continue to provide an inexpensive and accessible forum for communication of current issues related to disease control.

4.10 IMPROVED MANAGEMENT OF RESOURCES

Decreased Wastage of Pharmaceuticals

BCCDC recently conducted an investigation of the province's wastage of vaccines used for communicable disease control. Preliminary results estimate an annual provincial wastage of at least 4 - 5 % of the total budget for the vaccines. The investigation identified six main causes of wastage. As an initial response to reduce the wastage, a "Healthy Vaccines, Healthy Babies" campaign directed toward all health practitioners that vaccinate children and adults was implemented. The campaign provided information on the correct procedure for ordering, handling, storing and transporting vaccines. Wastage will be monitored annually and health practitioners will be informed of the required procedures for reduction and wastage.

Evaluation of the Contact Tracing Program for Tuberculosis

Individuals in contact with infectious tuberculosis cases are categorized for risk by association with the infected individual. All contacts, however, are invited to be screened for tuberculosis. An evaluation of this all-inclusive program will be conducted to determine the cost effectiveness of screening all contacts or whether only those in close contact should be screened.

Evaluation of the Post-Landing Tuberculosis Surveillance of Immigrants

A review of the medical surveillance program for immigrants arriving in British Columbia with inactive tuberculosis or who have been previously treated for tuberculosis will be conducted to determine compliance to the surveillance; the yield of active cases from the number surveyed; and whether the program outcomes are consistent with resources used to support the program. Last year, routine tuberculin skin testing of medical surveillance cases was discontinued as individuals were also routinely x-rayed, and in some cases required to produce sputum. An evaluation of the savings from this initiative will be determined.

Discontinuation of Routine TB Screening Among School Board Employees

Demographic data suggests that teachers represent a low-risk population for tuberculosis. On review of case records from the Division of Tuberculosis Control from 1990 - 1995, of the three teachers who were diagnosed with tuberculosis, two were non-infectious and none were picked up by the screening procedure. Consequently, had no screening taken place during this same time period, no cases of tuberculosis would have been missed. BCCDC will recommend that routine screening for tuberculosis in school board employees be discontinued beginning in 1996. However, the Medical Health Officer may make alternative policy decisions based on local disease incidence and prevalence subject to approval of the Director of Tuberculosis Control.

APPENDIX 1 Reported Cases of Communicable Disease in British Columbia

Disease	1993	1994	1995
AIDS	278	256	135
Amebiasis	336	328	337
Campylobacteriosis	2,359	3,168	2,836
Chicken Pox	1,042	980	297
Cholera	2	1	4
Cryptosporidiosis	79	164	199
Diptheria	4	0	1
E. coli 0157:H7	157	222	196
E. coli: Other	36	33	36
Genital Chlamydia Infection	5,321	5,366	4,760
Genital Herpes	3,495	1,999	2,606
Giardiasis	1,465	1,497	1,499
Gonococcal Infection	545	489	474
Hemophilus Influenza - B	12	13	10
Hemophilus Meningitis	9	5	1
Hepatitis A	476	276	408
Hepatitis B, Acute	176	242	243
Hepatitis B, Carrier	181	1,945	1,914
Hepatitis B, Undetermined	982	1,292	1,533
Hepatitis C	1,185	2,234	5,156
Legionellosis	5	4	9
Leprosy	3	1	1
Lyme Disease	6	6	0
Malaria	152	99	218
Measles	20	36	15
Meningitis, Bacterial	17	25	25
Meningitis, Viral	23	32	16
Meningococcal Infections	41	50	45
Mumps	63	56	38
Paratyphoid	5	14	12

APPENDIX 1 Reported Cases of Communicable Disease in British Columbia, Continued

Disease	1993	1994	1995
Pertussis	539	433	453
Pneumococcal Meningitis	7	4	13
Rotavirus	29	109	254
Rubella	30	40	28
Salmonellosis	1,025	869	869
Shigellosis	203	240	234
Syphilis (infectious)	16	17	19
Tetanus	2	1	1
Tuberculosis	330	332	312
Typhoid	24	20	16
Yersiniosis	883	826	1,011

APPENDIX 2 Service Statistics, 1995 - 1996

Services for Sexually Transmitted Disease and HIV:

Clinic Visits for Sexually Transmitted Disease(excluding HIV):	7,900
Clinic Visits for ATEC (HIV Tests):	6,151
Clinic Information and Education Telephone Calls Received:	30,715
Street Outreach Program Encounters for Sexually Transmitted Disease:	2,000
Street Outreach Program Encounters for ATEC (HIV):	4,726
Street Outreach Program Total Encounters: (not including STD or ATEC)	25,286

Services for Tuberculosis:

Clinic Visits for Diagnostic Services:	15,315
Clinic Visits for Screening Services:	14,926
Street Outreach Program Encounters:	3,105
Clients Visited by Field Operations:(30 outreach clinics held in 11 locations)	260
Encounters of Aboriginals on Reserve:	8,437

Provincial Laboratory - No. Of Tests:

Enteric Bacteriology:	38,393
Food Borne Disease:	1,650
General Bacteriology:	100,383
Tuberculosis & Mycology:	96,709
Parasitology:	43,378
Non-Viral Serology:	279,123
Viral Serology:	340,795
Viral Isolation:	88,356
Water Bacteriology:	56,820
AIDS Lab:	287,578
Total:	**1,333,185**

APPENDIX 3 FTE Allocation & Budget, 1996 - 1997

FTE Allocation

Divisions of Communicable Disease Epidemiology & Non-Communicable Disease Epidemiology	12.21
Division of Provincial Laboratory	130.00
Division of Tuberculosis Control	37.23
Division of STD/AIDS Control	36.70
Provincial Pharmacy	6.77
BCCDC Administration and Program Support	16.95
Total FTE's:	239.86

Budget Allocation

	In Dollars $
Division of Communicable Disease Epidemiology[1]	9,291,136
Division of Non-Communicable Disease Epidemiology	245,910
Division of Provincial Laboratory	10,112,557
Division of Tuberculosis Control	2,378,653
Division of STD/AIDS Control	3,882,348
Provincial Pharmacy	429,078
BCCDC Administration and Program Support	2,182,377
Total Budget Allocated:	28,522,059

note 1: Includes budget for biologicals for provincial immunization programs.

APPENDIX 4 BCCDC Service Contact Numbers

Managing Director	
Mr. Ron Zapp	660-6060
Communicable Disease Epidemiology	
Dr. Alison Bell, Director	660-6061
Dr. Arlene King, Associate Director	660-6061
Non-Communicable Disease Epidemiology	
Dr. Robert Fisk, Director	952-1464
Sexually Transmitted Disease (STD/AIDS) Control	
Dr. Michael Rekart, Director	660-6170
Dr. David Patrick, Associate Director	660-6161
STD/AIDS Clinic	660-6161
Tuberculosis Control	
Dr. Kevin Elwood, Director	660-6101
Director, Field Operations	660-6129
Willow Chest Centre, TB Clinic	660-6108
New Westminister Chest Clinic	660-8826
Provincial Laboratory	
Dr. John A. Smith, Director	660-6030
Dr. Peter Middleton, Medical Virologist	660-6044
Dr. William Black, Medical Microbiologist	660-6029
Dr. Judy Isaac-Renton, Medical Microbiologist	660-6076
Laboratory Test Results Line	660-5100
Pharmacy Services	
Ms. Joyce Seto, Pharmacist	660-6000
Planning and Resource Management	
Mr. Tom Cox, Associate Director	660-4331